### **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



A292.9 So3Wa Cop. 3

## WATER SUPPLY OUTLOOK FOR UTAH

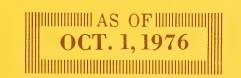


### U. S. DEPARTMENT of AGRICULTURE \* SOIL CONSERVATION SERVICE

Collaborating with

UTAH STATE DEPARTMENT OF NATURAL RESOURCES
-- DIVISION OF WATER RIGHTS

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.



### TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SURVEYOR ENROUTE TO THE MT. BALDY ARIZONA SNOW COURSE

SCS PHOTO AZ-5460

### PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 841 38
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

CONSERVATION OF WATER

### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

## WATER SUPPLY OUTLOOK FOR UTAH

and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

GEORGE D. McMILLAN

STATE CONSERVATIONIST SOIL CONSERVATION SERVICE SALT LAKE CITY, UTAH

In Cooperation with

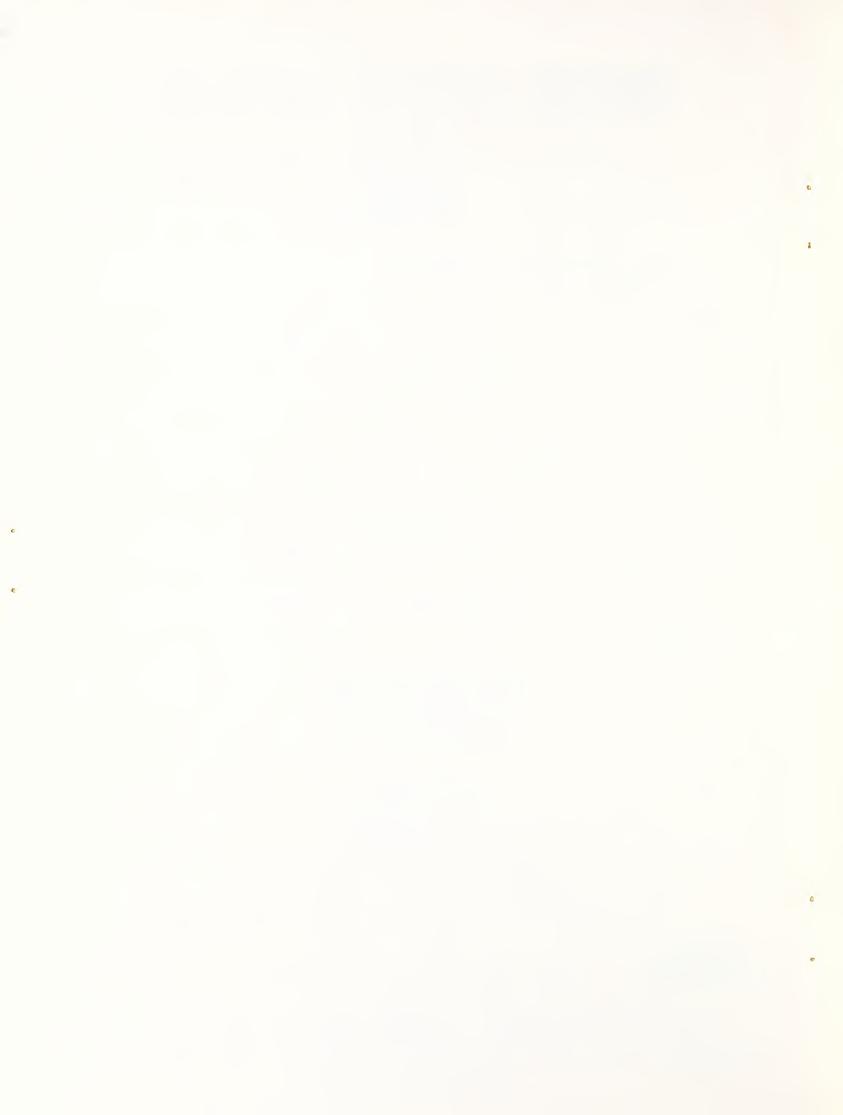
DEE C. HANSEN

STATE ENGINEER
DIVISION OF WATER RIGHTS
UTAH STATE DEPT. OF NATURAL RESOURCES

Report prepared by

BOB L. WHALEY, Snow Survey Supervisor and DAVID C. McWHIRTER, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE SNOW SURVEY SECTION 4012 FEDERAL BUILDING SALT LAKE CITY, UTAH 84138



### WATER SUPPLY OUTLOOK

SUMMARY as of OCTOBER 1, 1976

Utah's 1976 water supply ranged from "well below average" in the southern part of the state to "near average" on the Weber, Logan, and Provo Rivers according to provisional streamflow measurements by the U.S. Geological Survey.

Below average April-June precipitation at most mountain water producing areas coupled with excessive evaporation caused May-July streamflow to be 10 to 60% less than forecast on May 1.

Several reservoirs did not fill this spring and many have very low carryover storage this fall after a much drier than usual summer causing heavy water use. Reports indicate that many areas of the state will need an average or better snow pack this winter to produce enough runoff next spring to make an adequate water supply for next season.

The following table shows a comparison of forecasts made last May 1 compared to provisional flow measured by the U.S. Geological Survey.

Station	Forecast Period	May 1 Forecast (1000 A. F.)	Measured Flow for the Period (1000 A. F.)
BEAR RIVER			
Bear nr Woodruff Bear nr Randolph Bear nr Ut-Wyom. State Line Logan nr Logan Little Bear nr Paradise Woodruff Ck nr Woodruff Blacksmith Fk nr Hyrum	May-July May-July May-July May-July May-July May-July May-July	129 92 116 118 31 15.2 41	83 48 75 99 20 12 38
WEBER-OGDEN RIVERS			
Chalk Creek at Coalville East Cyn Creek nr Morgan Lost Creek nr Croydon Pineview Reservoir Inflow South Fk Ogden nr Huntsville Weber nr Oakley	May-June May-June May-June May-June May-June May-June	33 18.0 12.7 90 49 87	22 11 7.1 52 28 80
PROVO RIVER & UTAH LAKE			
Provo nr Hailstone Strawberry Reservoir Inflow	May-July May-July	83 30	98 27

Station	Forecast Period	May 1 Forecast (1000 A. F.)	Measured Flow for the Period (1000 A. F.)
TOOELE VALLEY			
Vernon Creek nr Vernon	May-July	0.4	0.4
DUCHESNE RIVER			
Ashley nr Vernal Uinta nr Neola Whiterocks nr Whiterock	May-July May-July May-July	52 66 43	44 56 45
SAN RAFAEL RIVER			
Ferron Creek nr Ferron	May-July	24	30
UPPER COLORADO BASIN			
Colorado nr Cisco, Utah Green at Green River, Utah Mill Creek nr Moab	Apr-July Apr-July May-July	2885 2742 3.7	3053 2251 4.6
SEVIER RIVER			
Clear Creek nr Sevier Salina Creek at Salina Sevier nr Gunnison Sevier nr Hatch Sevier nr Kingston	May-July May-June May-July May-July May-July	8.1 5.4 22 32 13.5	9.0 3.1 15 22 4.8
BEAVER RIVER			
Beaver nr Beaver	May-July	9.9	7.7
COAL CREEK			
Coal Creek nr Cedar City	May-July	14.9	8.3
VIRGIN RIVER			
Santa Clara nr Pine Valley Virgin nr Virgin	May-June May-June	2.8 26	1.8 14 (estimated)

### RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH October 1, 1976

TEGERTOR GIGHNAL (III	IUSAIIU ACIE FEEL) END OF MONT	rı	October 1,		
Basin or Stream	RESERVOIR	Usable Capacity		Usable Storage	Average +
30000		Сарасту	This Year	Last Year	AverageT
CDTLT DIGTN					
GREAT BASIN		:			
Bear River	Bear Lake	1421.0	1169.1	1217.4	1040.0
Dear Rever	Woodruff Narrows	26.5	0.0	18.9	26.3
Beaver River	Minersville (RkyFd)	23.3	2.8		14.0
<u>Little Bear</u>	Hyrum	15.3	7.7	9.1	14.2
	Porcupine	11.3	2.0	0.6	9.8
Ogden	Causey	6.9	1.1	1.7	2.5
oguen	Pineview	110.1	53.8	72.6	67.8
	THEVIEW	110.1	33.0	,2.0	0,10
Provo	Deer Creek	149.7	78.2	109.1	103.5
Settlement Creek	Settlement Creek	1.2	0.0		
		100			10.7
Sevier River	Gunnison	18.2	0.3	28.4	13.7
	Otter Creek Piute	52.5 71.8	16.4	20.4	37.5 43.8
		236.0	65.0	99.8	114.1
	Sevier Bridge	230.0	63.0	99.0	114.1
Spanish Fork	Strawberry	270.0	203.4	231.6	129.3
Utah Lake	Utah Lake	883.9	632.6	816.3	667.7
			}		
Weber	East Canyon	48.1	27.7	30.8	25.6
	Echo	73.9	12.6	42.8	53.9
	Lost Creek	20.0	12.9	12.5	11.3
	Rockport	60.9	43.0	57.5	30.5
	Willard Bay	193.3	147.3	156.4	161.7
COLODADO DEVENDA DAGA					
COLORADO RIVER BASI					
Ashley Creek	Steinaker	33.3	15.6	22.1	22.6
Ashrey Greek	beellaker	]	15.0	22.1	22.0
Colorado	Blue Mesa	829.5	605.8	694.9	
•	Lake Powell	25002.0	19641.0	20202.0	8370.8
Green	Flaming Gorge	3749.0	3474.0	3650.4	1629.0
Lakefork	Moon Lake	35.8	3.0	15.2	19.0
Price River	Scofield	65.8	31.1	43.7	34.4
TITCE KIVEL	Scorreid	03.0	21.1	43.7	34.4
San Juan	Navajo	1696.0	1283.6	1392.2	
	J -				
San Rafael	Huntington North	3.9	0.4	2.3	3.3
	Joe's Valley	54.6	29.2	50.0	34.3
	Mill Site	16.7	0.0		
Ctrorpos				151 0	
Strawberry	Starvation	165.3	121.8	151.0	
Uintah	Bottle Hollow	11.3	10.0	10.7	
		3 -	10.0	10.7	
	1	I~			

# UTAH PRECIPITATION DATA

## 1976 WATER YEAR

TOTAL	4.9 4.9 6.9 6.9 7.8	29.56 29.07 28.58 23.57 31.91	31.50 19.24 52.10 29.07 38.01	42.07 47.20 21.68 33.87 23.43 33.81 50.09 46.90 28.37 35.95
S EPT .	1,95	3.24	3 331	6.20 1.69 2.57 8.59 7.07 2.70
JULY-S	77 7 6 0	9/29 9/29 \$ # 9/28 9/28	10/01 9/28 9/30 9/30 10/01	9/21 9/21 9/28 9/27 \$/28 10/03 9/28
	1.11	ν, ω, ς	1.80 2.67 2.67	3.68 1.80 1.27 2.57 1.99 2.05 1.40 2.88
JUNE	6/30 6/14 6/28	3	6/30 6/30 6/34 6/30	6/28 6/28 6/28 6/29 6/29 6/14 7/20
	3.90		1.00 1.20 2.60 2.50 1.70	1.55 1.59 1.59 1.50 1.50 1.50 1.50
2. 4.	5/26	12 /2	5/28 5/28 5/01 5/28	5/26 5/26 5/26 5/26 5/26 5/26 5/26
	2.25	ش س بر بر	2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
APRIL	4/28	12	4/28 4/28 4/28 4/22 4/30	4/28 4/27 4/27 4/23 4/23 4/28
	1.80 2.80 4.40 5.93	0 2 4	5 . 0 6 . 0	3.46 2.18 3.27 5.17 4.73 4.42 2.90 1.19
MARCH	3/30 3/29 3/29 3/30	3	3/20 3/29 3/29 3/29 3/20	3/31 3/30 3/30 3/31 3/31 3/22 3/31 3/22
>> α:	1.12	a. 1- 4	3.577 3.577 1.779 5.573	8 .74 2 .20 5 .20 6 .86 6 .09 7 .51 4 .40 6 .68 3 .80 4 .50
FEBRUA	2/25 2/29 2/24 2/25	2/25	2/25 2/25 2/25 2/25 2/25 2/25 2/25 2/25	2/25 2/25 2/25 2/25 2/25 2/25 2/25 2/25
<b>&gt;</b>	1.25	2.70 1.27	3.10 3.10 3.45 B A	1.40 .10 1.39 4.37 2.09 1.80 1.32 2.33
JANUAR I N	1/26	1/26	1/26 1/26 1/30 1/26 V F R	1/26 1/26 1/27 1/27 1/27 1/27 1/27 1/27
• A	5.36 6.80 10.84	9.68	8.50 6.21 7.20 10.32	13.00 7.95 8.42 10.82 17.27 15.25 6.10 6.10 5.40
OCT DEC	12/29	12/29	12/30 12/30 12/29 12/29 12/29	1/02 1/02 1/02 1/02 1/02 1/02 1/02 1/02
STATION NAME  BEARRIV	AKE-MILLER STON MTN CCREEK SPRINGS IN BASIN CTY SPI	D HILL DEN FORK D HOLLOW V LAKE TLE BEAR UP TE CRISTO	ALVER SMT MATER CMP SROVE RS SROVE RS AA SPRING M FLAT	BEN LOMOND LOW BEN LOMOND PK CAUSEY DAM CHALK CREEK 1 CHALK CREEK 3 CHALK CREEK 3 DRY BREAD POND FARMINGTON GS FARMINGTON LOW GUILDERS PEAK HORSE RIDGE LOST CREEK

NOTE: BLANK SPACES INDICATE NO READING TAKEN, NEXT READING IS CUMULATIVE(EXCEPT AS NOTED #) #: GAGE MOLESTED, DATA FOR THIS PERIUD LLST \* Estimated

## UTAH PRECIPITATION DATA

## 1976 MATER YEAR

TOTAL	6.3	22.75 22.20 28.51	7.5		24.27	3.6	1.8	-	1.5	27.47		3 ° 6	34.37	9 • 5	4 .5		22.03		31.40	0.2		0.1	26.96 19.06 19.53	0
EPT.	2.53	2.15	2.24		Ľ	1.43	posi	.72	, 4	4.10	00	. 8	8	0.	•		2.97			3.90	(	4.18	1.28	
JULY-S	200	9/29	/3		67/6	9/2	71	0/0	/2	4	12	/3	12	8/5	0/		6/25		9/17	1/2/		12	9/17	4
	1.51	1.99	1.15		(*	1.09	6	1.12	2.			6.	٠,	8	1.55	di di	• 5			1.35		2.34	.85	
JUNE	6/23	6/28	6/28		0	67/9	(	7/01	/29			0 /	12	/3	7/01	/3	0/			6/30		20/2	6/28	
	1.43	1.36	1.56		4	1.11	(	1.20	•	Ŗ	1.50	4,0	-7	١.	0.	•2	. 7			4.	2.7	2.06	1.10	
HAY	5/28	5/26	5/26		()	5/24	12	5/28	7 /	12	12	12	12	2/	12	12	5/25			12	12	5/26	5/24	
	3.20	1.95	2.83		4	2 . 74	7	2.38	0	4.			•	-	6.	00	4 - 00			1.88	6.	2 . 75	2.55	
APRIL	4/23	4/28	4/28		10	4/27	13	5/01	7/	12		12	12	12	/3	12					2/	4/56	4/27	
	2.90	4.33	3.55		α	0	9.4	2.04	7.	6.	4.50	2.3	~	æ	۰,4		C.			₽.	0	3 .45	2.32	
MARCH	3/22	3/31	3/30	Z	6/	72	/2/	3/30		12	$\sim$	12	13	/3	/3	/3	3/28			3/30	13	3/25	N: M	
ARY	7.50	4.41 5.36	3.16	B A S	- par	4.30	\$	3.26	E) 6		60°5			-	7.76		-	N		1.87	0	2.20		
FEBRUA	2/24	2/25	2/25	<u>د</u> د	2/25	2/24	2/28	2/28	0117	2/25	2/28	5/54		13	2/25	/ 2	$\sim$	ВА		2/25	2/25	2/23	2/24	
× ≺	2.90	2.48	96.	× ×	7	2.47	. E.O	2.74	8	6.	2.68	٠.		0 .	5.40	٥ ٦	0.	V FF R		1.81	.2	640	1.60	
JANUAR	1/30	1/27	1/21	Z	13	1/29	3		7 /	12	1/31	2/		1/17	1/29	1/27	1/31	~		1/26		1/29	1/29	
F C •	6.00	12.83	11.48	n R D	o	7.73		8.37	ů.	0.	7.05	<u>_</u>	0	8 - 2	٠,4	9.0	• 6	E F N		5.47		4.75	6.15	
OCTDE	12/29	1/02	1/07	F - J	C /	12/24	43	12/29	)	2/2	12/29	2/3	0/3	0	0	1/0	2	ا د ه		12/29	45	12/24	12/24	
STATI EN NAME	1DDLE ARLEY	DDEN M GEBRUS RGEANT	HINGL M MORE	UTAH LAK	EAVER DIVIDE	ANIE	ESERET PE	ORTA	AKE CREEK	AMBS CANYO	100LF C	AYSON RS	DCKY BASIN	DAPSIONE RS	IMPANUGUS	RIAL LAKE	ERNUN C	DUCHESNE	ASHLEY TWIN LK ATHOOD BASIN	BLACKS FK JCT	BROWN DUCK RDG	BURNT CREEK	CHEPETA-WTRUCK CURRANT CREEK E FK BLACKS FK FIVF POINT LK	

NDTE: BLANK SPACES INDICATE NO READING TAKEN, NEXT READING IS CUMULATIVE (EXCEPT AS NOTED \*) \*: GAGE MOLESTED, DATA FOR THIS PERIOD LUST \* \*Estimated

### 4 **4** Z d. C I-P I ш <u>~</u> ۵ I Ø

### 1976 WATER

TOTAL	23.96	2.9	9.9			1.0	1.5	28.38	2.4	2.8		80 0	700	21.86	4.5	5.1		28.32		8 . 9	1.8	28.56	8.0	9.1	5.9	6.1	6.9	1.7	7	. 0	20.05
EPT.	4.35	. 4	2.17		94.4		2.61	•	3.44			5.34	-	5.76	86.4	)		1.91		-	• 2	2.00	9.	• 9	6.	80	• 2	<b>5°</b>	4	9 4	2.70
JULY-51	9/28	12	7		/ 1	/ 1	7	\$ \$		1		7	[ /	9/13	-	12		\$/23		0/	9/5	67/6	12	8/5	0/	/3	12	12	13	, ,	9/28
	06-	5	2.44	.3			1.21	7	.91		2.12	5		•33	1.25	1	1.39	0.		N	6	5	• 2	9	• 2	• 5	3	<b>5</b> •	7.	7 (	.35
JUNE	7/02	/3	7/06	0/			7/07	>	7/01		7/02	0/		1/01	7/02		0	/29		9	12	12	12	12	0/	/3	0/	12	7 5	, ,	6/28
	2.21	0.	3.44	.5	e 3		2.02	0	2.55		5.30	6.	•	1.92	3.23	l	5.29			- Parel	. 7	5.96	• 5		۰,4	0.	0	e .	· -	•	1.60
4 A Y	5/22	12	5/26	12	12		5/22	2/	5/26		2/56	7.5		2/56	5/26	!	5/55			/0	12	5/56	/2		0/	12	12	12	7 (	3,0	5/26
	4.15	0.	11.92	· 3	• 5		3. 0.00 0.00	•	4.04		4.93	80		2.63	4.31	)	3.43		S N	-	3	63	.5	3	3	• 6		-		•	2.65
APRIL	4/26	12	4/29	12	12		4/29	7/	4/29		67/5	12		4/59	6/17		67/5		A S 1	12	/3	/3	13	12	12	12	13	/2	7 /	2/	67/5
90p=r	1.85	2.82	0D 6	1.14			1.56	Ţ	1.47		1.65	ထ	•	1.20	2.60	1	1.69		R	7.	.2	2.30	$\epsilon$	9.	۲.	C.	Ç	6.0	. 0	) <b>~</b>	1.45
MARCH	3/25	3/30	/3	3/56	13		3/30	0	3/31		3/31	/3		3/31	3/30		3/30		1 V E	3	/3	12	12	12	/3	/3	12	13	7	. "	3/31
ARY	4.10	2.09	5	62.5			3.72	0	3.81		3.48		•	3 .24	3.03	1	3.85		<i>∝</i>		4.	-	8	0.	3	-7	. 2	r, r	3 75	6	2.95
FEBRUARY	2/23	2/25	Ν.	2/24			2/25	J	2/25		5/52	5/22		5/52	2/25		2/25		N 0 M		$\sim$	r\u	N	CV	$\sim$	2	N.	010	2//2	J.	2/25
R ≺	040	2.00		2.70			1.00	•	. 83		.37	.50		1.01	040	1	1.35		F R F		2.50			2.15		2.60	8	2.40	3 . 40	0	2 - (-0
JANUARY	1/29	7.5	1/26	1/29			1/26	7/	1/27		1/27	2	•	1/27	1/26	l	1/26		+ -1 -1		1/30			1727		1/23	1/29	1/29	1/29	3 4 7	1/30
E C .	00.9	6.	5.55	• 2			5.57	r	5.40		5.04	3	- 1	2.11	5,30	•	5,32	3	A F A	6.	€.	6.30	0.		æ	œ	40	6.	ಏ ನ	7	6.35
OCTDEC	12/24	2/2	12/29	$\circ$			12/29	>	12/30		12/30	/3		12/30	12/29	: I		10/28	~ ~	2/2	2/3	/3	2/3	2/2	2/5	2/2	1/0	2/3	6/3	2/3	12/31
STATION NAME	GRIZZLY RIDGE HENRYS FORK	WINTA	HICKERSON PARK HIGHLINE TRAIL	INDIAN CANYON	JACK SON PARK	KIDNEY LAKES	KINGS CABIN UP	LAKEFORK BASIN	LAKEFORK MIN	LIGHTNING LAKE	MUSBY MOUNTAIN	PARADISE PARK	KETNULUS PAKK	KUCK CREEK	SPIRIT LAKE	STEEL CRK PARK	TROUT CREEK	W FK DUCHESNE WINDY PARK	PRICE-SA	BLACKS FLAT-UM	BUCK FLAT	0	CAMP JACKSON	DILLS CAMP	للنا	GOOSERERRY RES	Z	ر - کد	PED PINE PIECE		WHITE RIVER 1

67/9 1.35 5/28 3.70 82/5 1.35 3/59 1.73 Z provide 2/25 ≪7 2.25 22 4 1/27 4.60  $\simeq$ فالما 2/30 > 4 u 8 ı DAMS v 1 E BEAVER

. P. 5

NOTE: BLANK SPACES INDICATE NV PEADING TAKEN, NEXT READING IS CUMULATIVE (EXCEPT AS NOTED \*: GAGE MOLESTED, DATA FOR THIS PEPIOD LUST \* \*Estimated

### ⋖ A ۵ z ECIPITATI œ ۵ I 44 $\supset$

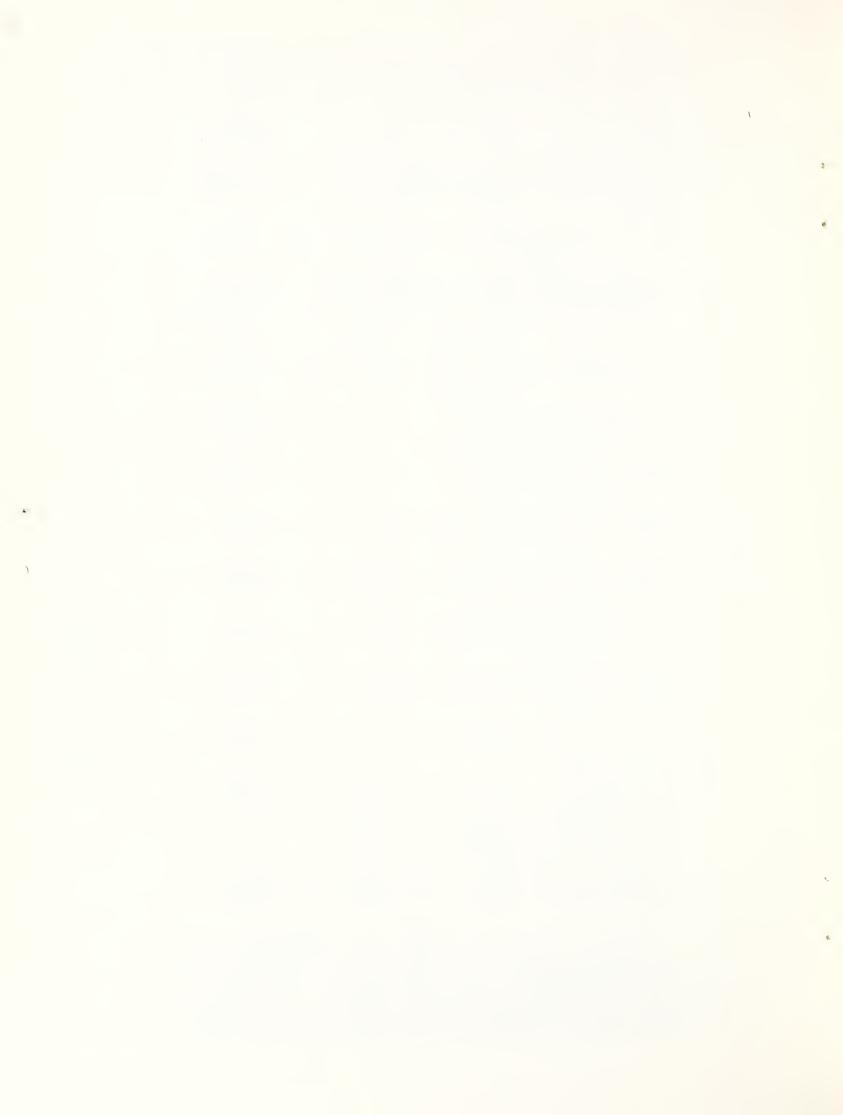
C

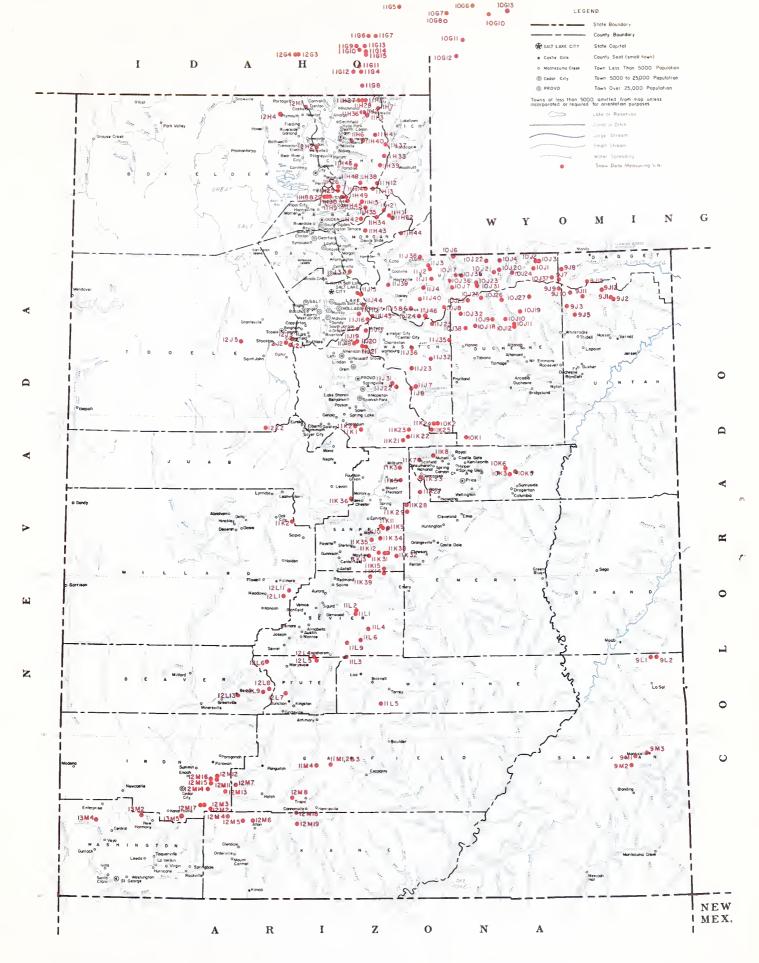
C

## 1976 WATER YEAR

TOTAL	23.15	1.0	7.7	6.1	5.4	1.6	8 . 1	9.6		28.15	27.10	20.64	28.70	22.65	24.36	15.69	24.76	31.97	21.50	21.85	22.66	9.51			22.63	16.03	22.30	29.78	18.60	
EPT.	5.07	4	0	5.	.5	3	•	9 .		06.	06.	.10	5.30	.35	.58	09-		.26	06.	.32	° 28	2.31			Ć	0 0	4.10	.70	.75	
JULY-SE	9/29	9/2	l M	3	m	ന	3	O.		$\sim$	3	N	$\sim$	O.	O.	$\sim$	N	PN.	N	$\sim$	CJ.	67/6			9/30	\$ \C \ 0	9/27	9/27	9/27	
	.34		6.	0	ň	3	\$	$\varepsilon_{\circ}$	0	4,*	3	7.	N	00		2		.52	4.65	.76	.15	•02					30	)	0	
JUNE	7/01	2 /	12	12	12	12	12	12	/01	0/	13	0/	12	12		6/28		-	-0	_	-	6/28				(	6/28	. ~	12	
	1.45	5.5	,	9.	ဏ္	2.22	0.			00	63	•	.80	6.	7.	63		. 70			3	1.42			ſ	0 . 1	0.5	040	.30	
HAY	5/28	2 <		9	0/					12	12	12	5127	12	9	7		5/03		0	12	5/21	V	÷		07/6	_	12	5/26	
	2.99	9 8	0 •	80	S	9 .	-	0.		• 2	• 4	6.	01.5	0 .	-	0.		7.58				1.54			L		3,10	9.	0.	
APRIL	4/30	13	12	13	/3	/3	/3	12		12	12	/3	4/30	12	12	(3				12	12	4/58		2		5	4/28	/3	/3	
_	2.58	וי ני	-		-	3	.2	3		3	5.	0	2.75	•2	$\varepsilon$	(C)		9.	1.	٠ 4	. 7	2.39	>	•		7 .	2.50	10	9.	
MARCH	3/31	6/3	12	/3	/3	/3	/3	12		/3	13	13	3/30	12	12	13		12	12	12	12	3/26		4	•	9 (	3/29	. ~	Ē	
ARY	3.55	-	0.	9.	•	-	FL/-	6.		æ	80	9.	9.35	.2	5	.3		P.	5.	5.04	•		⊢ 2	=	•	ە ئ •	5.20	90	7.	
FEBRU	2/27	72	12	13	12	12	12	2/		21	12	12	2/25	12	12	12		13	12	2/25	12		- «	t	(	9	2/24	7	12	
RY	. 97	30		2.00						6.	1	8	.50	2.70		67.		9.53			99.	$\sim$	u I	٦		<b>-</b> <	1.20	0%		
JANUAL	1/30	12	12	1/30	É/	13	/3	13		12	12	/3	1/28	12		1/28		1/29		12	1/30	/3	2	•		7/	1/28	12	12	
E C .	5.88	m ac	9.	• 4	70	5.	ಎ	$\boldsymbol{\omega}^{\mathrm{e}}$		9.	0.	5	5.10	• 4		2.50		2.51		8	3.99	5	- - >	4	`	0 0	7	6	9.	
DCT DE	12/31	2/2	2/2	2/3	2/3	2/3	2/3	2/2		2/3	212	2/3	12/20	2/3		12/29		10/30		0/	12/24	2/2	ت ج ا	<del>-</del>		2/2	12/29	2/2	2/2	
STATION NAME	LAT REEK	ASTLE UCK CR	ARNS WORTH L	BRC HEADQIR	BRC MA	BRC MEADO	_	DOSFBERR	I-10P	IMBERLY	AMMOTH	<b>ERCHANT VAL</b>	$\overline{}$	T BALDY R	AK CREE	ANGUITCH	ICKLE KEG SP	INE CREE	REES FLAT	HINGLE MIL	WIDISOF	WIDTSOE RS	- V		C.R.	DAIC ELAT	ALL PRIF	EBSTER	ANKEE RES	

NOTE: BLANK SPACES INDICATE NO READING TAKEN, MEXT READING IS COMULATIVE (FX CEPT AS NOTED \*) \*: CAGE MOLESTED, DATA FOR THIS PERIOD LOST \* \*Estimated







SNOW COURSES AND RELATED DATA MEASURING SITES

UTAH



<b>BASINS</b>
RIVER
COLORADO RIVER
& UPPER
•ઇ
BEAR 4
TO UTAH,
0
INDEX

ELEV.	9,800	10,250 10,250 10,300 10,300 7,800 8,000 11,000 9,100 11,300 10,800	10,280 10,980 10,980 10,180 10,180 10,280	8,200 7,800 8,700 7,970 7,970 7,600 9,100 8,550 7,600	9,400 9,800 10,000 10,000 9,950	9,200	8, 800 8, 800 8, 800 8, 600 8, 800 9, 400	7,050 9,500 9,500 9,500	9,250 7,500 9,200			
A D	11E 20E	15E 65W 10W 10E 10E 88W 88W		146 86 56 136 76 76 136 86 86	4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	34 6	22 22 22 24 24 24 24 24 24 24 24 24 24 2	23E 1W 1W	W8 W9 W9		U. Vol.	erature
±	<u> </u>	\$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$		135 125 145 145 145 105 105	195 145 165 175 175 175 165 195	205 208	308 268 268 268 268 338 348 275 275	348 348 345	385 385 375		Marker.	and Temp
) J	23	2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	27 27 27 28 28 22	32 250 250 32 32 30 30	23 124 24 26 26 8 8 8 21 21	34 27 27	95 35 24 24 DRAINA G E S 35 5	22 22 22	2 22 20		4D n texampte) alon Gage siyure Statron, m Section and Aerral re Statron and Precipe e Only	on Gage, Snow Pillon
n Mark	Tokewanna Peak Windy Park Dilicherane bivep	AUCOLES NE REVER Alwaced Bessin Bessen Duck Ridee Chepeto -Whiterocks Lakes Current Creek Compete -Whiterocks Lakes Compete -Whiterocks Jummit East Portal Lake Indian Conyon Lockson Park Lakefork Basin Lakefork Basin	Lakefork Mountain Lakefork Mountain Lakefork Mountain 13 Lightning Lake Lakefork Mountain 13 Lightning Lake Routh Mountain Paradise Pork Rock Creek Strawberry Divide Strawberry Divide West Fark of the Duchesne	PRICE RIVER Caral Dy Volley Divide Gaoseberry Reservoir Grassy Iraid Creek-Left Fark Janes Ranch White River #2 White River #3 White River #3	SAN RAFAEL RIVER Buck Flor Hurrington-Horseshoe Red Fine Ridge Seeley Creek South Pond South Rod Wrigley Creek Wrigley Creek	MUDDY RIVER Black's Fork DIII's Camp FREMONT RIVER	Donkey Reservoir Figh Loke Johnson Volley SOUTHEASTERN UTAH Buckboot Flot Gamp Jockson LoSal Mountain LoSal Mountain LoSal Mountain LoSal Mountain	Monitcello Park ESCALA NTE RIVER Widsoe-Escolonte #2 Widsoe-Escolonte #2 VIOCEN NO 1975 F	Kolab-Crystal Long Volley Junction Webster Flat		Numbering System (LECEND  (U)7 Some Course Only.  (U)7 Some Course Soll Posture Statem and Area Holaver.  (U)7 Some Course, Soll Posture Statem and Area Holaver.  (U)7 Some Some Presentation Cage Only.	10J7PS Snow Course, Precipitate
-	22		0000000000	22222222	222222	22 =	יככככ כככי	2 223	222			
2	10J31P 9J12ap	10.127 op 10.99 9.90 pt 11.123MP 11.127 pt 10.126 pt 10.136 pt 10.136 pt 10.136 pt	1011 1012 1012 1012 915 918 1013 1113 1113 1113 1113 1113 1113	10K5M 11K4P 11K4P 10K3M 11K7 11K7 11K7 10K6 10K2 11K24	11K31P 11K5 11K28P 10K2MP 11K27 11K27 11K27 11K27	11K14 11K15P	9M2P 9M2P 9L2P	7M.3 11M.1 11M.2PT 11M.3P	13M5PS 12M6 12M3MPT			
	5,500 8,140 9,800	8,000 6,450 7,460 7,400 7,400 8,700 10,000	7,500 8,800 8,700 8,700 8,700 1,400	9,300 8,200 7,600 7,600 8,700	10,000 8,840 8,840 9,500 7,766 7,766 7,300 8,500 8,500	6,020 10,290 8,200 9,300	8, 100 10,000 8,300 8,700	8,000 8,000 8,200		) 10,500 9,300 8,925 9,700 7,900	0.8500 9.7500 9.7500 9.7100 9.7150 8.730 8.5500 9.9300 9.9300	7,700
2	2E 3E 9E	7.4% 3.3% 3.5% 3.5% 3.5% 3.5% 3.5%	5W 2W 8W 7W 7 V		24 3 3 4 4 E 5 5 E 5 5 5 5 5 5 5 5 5 5 5 5 5 5	7W 5W 5W		17W 14W 9W		Š	226 1146 1156 1156 1156 1176 1176 1186 1186	
	25 25	ж Е Е Е Е Е Е Е Е Е Е Е Е Е Е Е Е Е Е Е	_		175 235 135 185 175 225 225 225 155 185	295 295 295 295	∢	385 385 375		مَ ```	ZZZZZZZzzZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ	
, ac	27 33 5	25 24 24 15 15 21 8 32 38 30 36	21 of Richfield, 33 36 23 11 32 24	26 4 & 5 29 3 22 20 50n Pit	26 & 27 22 113 16 19 9 4 4 20 20 23	23 18 8 & 9		15 2 18		1 (above 20 25 33 14 4	23 23 23 23 23 22 22 22 24 31 31 31	2
4		AT SAL		ncluding	ek Sek		23 10 10 26 & 20 14 ARMONY			UTAH		
** )	Timpanogos Cave Comp Timpanogos Divide Trial loke	JORDAN RIVER & GREAT Beover Creek Divide Bevan's Codin Desert Pook Middle Conyon Mill D'Souh Fark Mill D'Souh Fark Mill D'Souh Fark Ricky Bazin-Settlement Conyon Silver Lake (Brighton) Silver Lake (Brighton)	Vernon Greek  UPPER SEVIER RIVER (Sc Box Greek Byyce Gayte Volley Castle Volley Forview High-Too Maunthin	Kimberty Mine Midwoy Volley Ponguitch Lake Roinbow Point Squaw Springs Widsce R.S. LOWER SEVIER RIVER (Including Beover Dam G. B.R. C. Headdoorters	G. B. K. C. Meadows Gooseberry R. S. Mannaolin R. S. –Cattonwood Creek Middle Fork S. –Cottonwood Creek M. Buldy R. S. Pickle Kee Springs Pickle Kee Springs Rees S. Fork	BEAVER RIVER Beover Race Track 8ig Flat Merchant's Valley Otter Lake	N K K	Little Grassy Greek Long Flat COAL CREEK SUSC Ranch	O RIVER DRAINAGE	UPPER GREEN RIVER IN Ashley Twin Lakes Black's Fork G.SEast Fork Black's Fork Junction Buck Tosture Burn Creek	chizzly Ridge Henry's Fork Hewrins CS. Hickerson Pork Highline Trail Hole-in-the-Rock Hole-in-the-Rock King's Cabin (lower) McCoy Pork Madde Bouver Creek Raynald Bouver Creek Raynald Bouver Creek Raynald Rocker Creek	Steel Creek FOTK
	222	22222222	o 0000000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2222	22222	22 2	ADO R	22222		0
i	11.J18P 11.J21P 10.J8P	11)465p 12.12 12.15p 11)441P 11.10 11.10 11.10 11.116	12K2P 12K4P 12M8 12M13P 12M14P 12M18 11M18	1216P 12M2M 12M3P 12M5 12L5 11M4P 11K13P 11K11P	11K10 11K2P 11K2P 11K2P 11K2P 11K3P 11K36 11K36 11K36	12L13 12L7PS 12L9PS 12L8	12M16 12M14 12M12 12M15 12M11P	13M4MP 13M2MP 12M17	COLORA	9J11aP 10J21P 10J22P 10J23a 9J14P	9.138 10.144 10.148 9.188 9.159 10.1 9.179 10.379 9.1708 9.1708	doz (0)
,	8,700 7,900 7,500	00000000000000000000000000000000000000	7, 98 7, 98 7, 600 6, 300 6, 300 6, 300 7, 900 7, 900 8, 8, 8, 900 8, 900 9, 90	7	6, 7, 6, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8,	6,000 8,000 6,000	6,000 6,780 8,230 8,230 8,420 8,420 6,300	7,500 7,900 7,900 6,950 8,000	7,400 9,800 6,500 8,350 8,260 7,300 6,125 9,300	7,500 8,100 8,500 9,000 9,900 7,600	7 2 300 6 2 2 8 9 2 300 7 2 5 8 9 0 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0,100
		26 N 118W 9E 26N 118W 30N 116W 20N 116W 20N 114W 20N 118W 20N 118W 20N 118W 20N 118W 20N 10E		1255 42E 165 42E 165 42E 137 4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			XX X X X X X X X X X X X X X X X X X X		2		45 36 115 66 115	
)	Idaha) 7 19 9	25 13 7 34 34 19 19 32 32 32 32 32	27 29 34 34 34 34 34 34 34 34 34 34 34 34 34	24 24 24 24 24 31 10 10	22883327	3 25 2	22 33 4 2 2 3 3 4 2 2 3 3 4 2 3 3 4 3 5 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5	28 4 17 & 20 7 14 26	29 16 20 27 20 20	22 22 25 25 25 25 25 25 25 25 25 25 25 2	27 27 27 27 27 27 27 27 27 27 27 27 27 2	7.4
GREAT BASIN DRAINAGE	UPPER BEAR RIVER (above Harer, Idaho, Big Park Burts-Miller Ranch CCC Ccmp x	Gold Hill Hoyden Fork  Kell & Roner Station  Kell & Roner Station  Kell & Roner Station  Lijt Juke Wedge Goud Station x  Monte Cristo R. S.  Piney Lobarge x  Polison Meadows x  Solt River Summix  Sinder Boil x  Sinder Boil x  CUINCER BEAR RIVER (below Horer.		Engigent Summit Emigrator Summit Emigrator Caryon (mouth) Engisting Carden (Sty Summit Gaogge Peak Hell Coryon Heal Hollow Horseshoe Basin Norrows Klondike Norrows Liberty Springe			Ben Lannand Trail Cousey Dan Cutter Creek Dity Bread Pand Guilder's Peak Mongpie Powder Mountain Hideeway Pewder Mountain Sundown Sogebrush Flor		Forniti Caryon East Shingle Lake Hordsrabble Hoodeo Knoll Horse Ridge Kilfore Creek Lost Greek Cust Grownit		PROVO RIVER & UTAH LAKE Comp All amont Clear Creek Ridge #1 Clear Creek Ridge #3 Clear Creek Ridge #3 Ustrhamon R. S. Hobbis Creek Summit Lake Creek Summit Clear Creek Summit Royson R. S. Rack Bridge Soopstone R. S.	South Fork N. 3.
ASIN	≥⊃≥:	⊃⊃≷≷≲⊂⊂ ≶≷≎⊂	>>->>-		)	o-		22222	222222	222222	222222222	)
GREAT B.	10G11 10J6P 10G7	10.136p 10.136p 10.6175 10.135p 11.1172P 10.610 10.610 10.613MP	11H37p 11H38p 11G11 11H38p 12H1p 11G12 11H33P 11H33P 11G14a	1163 1167 1167 1167 1167 1167 11615 11615 11615 11615 11615 11615	11466 111466 111466 11165 11168 11169 11170 11170	11G4P 11H14M 11HBP	111130P 111133P 11113AP 11113AP 111142P 111145P 111148	11,24 11,11P 11,2MP 11,13MP 11,11PS	111446 111376 1113776 111438 11142187 1114318 111432	11.15PTS 11.23B 11.14 11.33P 11.14P	11/20 11/20 11/22 11/27 11/27 11/36 11/36 11/36 11/36	-

### Agencies Cooperating in Utah Snow Surveys

### U.S. GOVERNMENT AGENCIES

- U.S. Department of Agriculture Soil Conservation Service Forest Service
- U.S. Department of Commerce NOAA, National Weather Service
- U.S. Department of Interior
  Bureau of Reclamation
  Geological Survey
  National Park Service

### STATE AGENCIES

Utah State University
Utah Fish and Game Department
Utah State Department of Natural
Resources, Division of Water Rights
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner

### MUNICIPALITIES

Manti Salt Lake City

### ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association Board of Canal Presidents - Jordan River Emery Canal and Reservoir Company Moon Lake Water Users Association Ogden River Water Users Association Provo River Water Users Association Strawberry Water Users Association Sevier River Water Users Association

### PRIVATE AGENCIES

Kaiser Steel Corporation

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FEDERAL BLDG., - ROOM 4012

125 SOUTH STATE ST. SALT LAKE CITY, UTAH 84138

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300



## FIRST CLASS MAII

State of the state The second of th SE SE

> COOPERATIVE SNOW SURVEYS FEDERAL - STATE - PRIVATE

domestic and menicipal water supply, hydro-electric power water supply for irrigation, necessary for forecasting generation , navigation , Furnishes the basic data mining and industry "The Conservation of Water begins with the Snow Survey"